SPECIFICATION AMENDMENTS

Please amend the specification by replacement of the following enumerated paragraphs:

On page 1, replace paragraph [002] with the following amended paragraph [002]:

[002] The present invention relates to a novel adhesive composition and process for forming styrenic based adhesive and cement coatings on thermoplastic polymer surfaces, particularly to toy articles formed of elastomeric materials. Specifically, the present invention ~~This invention~~ relates to hot melt adhesives comprising a high molecular weight polystyrene-ethylene/butylene-polystyrene block copolymer and articles constructed therefrom. These compositions are useful in a variety of hot melt adhesive applications such as children's toys where adhesive composition superior particularly in high bonding strrength, heat resistance, and hot-cold cycle resistance properties all particularly suited for unfriendly toy play environments.

On page 4, replace paragraph [013] with the following amended paragraph [013]:

[013] In accordance with the present invention, there is provided an improved adhesive composition particularly useful for toy article applications comprising a hot melt adhesive containing:

(a) from about 50 percent to about 98 percent by weight of a base A-B-A block copolymer having a molecular weight greater than about 200,000, said block copolymer having polystyrene end blocks and a substantially saturated midblock;

(b) from about 1 (one) to 49% percent by weight of another A-B-A compatible elastomeric block copolymer;

(c) from about 0.50 to 5 percent of a liquid plasticizer; and

(d) from about 0.50 to 5 percent by weight of a solid tackifing agent,

wherein these basic adhesive ingredients total 100% [[,]] by weight . [[,]] ~~based on the weight of these adhesive composition components, and wherein the~~ The instant hot melt adhesive composition has a viscosity of about ~~1,000~~ 2,000 to about 50,000 cP (centipoise) at ~~180~~ 200 degrees C [[.]] and a melting point of about 150^0C. to about 200^0C. It is preferable that the block copolymer and the other A-B-A compatible elastomeric copolymer ingredients together comprise from about 90 to 98 weight percent of the total composition, the other second ABA compatible copolymer being present an amount of from about 20 to 35 weight percent ~~being the preferred amount~~..

On page 7, replace paragraph [018] with the following amended paragraph [018]:

[018] The applicants have found that the subject preferred high molecular weight S-EB-S block copolymer may also have added thereto, another compatible A-B-A triblock copolymer, an A-B diblock copolymer, an A-B-A-B-A-B multiblock copolymer or radial block copolymer, and grafted versions of such including Shell Chemical's TKG-101 and RP-6912. Such A-B-A block polymers are disclosed in Collins et al., U.S. Pat. No. 4,136,699, herein incorporated by reference in its entirety, or are available under the tradename of Kraton G-1654 commercially available from Shell Corporation. It is anticipated that grafted modifications of Kraton G-1651 to exhibit even greater improvements in the tack and cohesive bonding properties set forth herein. At small concentrations (less than about 4%) Kraton G-1651 may also be blended with other polymers such as EVA (ethylene vinyl-acetate), EMA (ethylene methyl-acrylate), as well as crystalline and amorphous polyolefins. The use of additional block copolymers is preferred if one desires to reduce the viscosity to improve the processability of the adhesive and/or increase

the tack for some applications, but is not necessary to the instant invention. Preferred compatible block co-polymers as the compatible ingredient include A-B-A compatible block copolymer in which the B segment is selected from the group consisting essentially of polyethylene, polypropylene, polybutylene, isoprene, and combinations thereof (eg. S-EP-S (styrene-ethylene-propylene-styrene), SPBS (styrene-propylene-butylene-styrene), S-I-S (styrene-isoprene-styrene), SBS (styrene-butylene-styrene) etc.)

On page 8, replace paragraph [020] with the following amended paragraph [020]:

[020] The adhesive of the invention contains a tackifying resin. Tackifying agents are present in amounts up to 5% by weight. Preferably, the resin is present in an amount of 0.5 to 5 weight percent. Tackifying resins useful in the adhesives of the invention comprise resins derived from renewable resources such as rosin derivatives including wood rosin, tall oil, gum rosin; rosin esters, natural and synthetic terpenes, and derivatives of such. Aliphatic, aromatic or mixed aliphatic-aromatic petroleum based tackifiers are also useful in the adhesive of this invention. Representative examples of useful hydrocarbon resins includes alpha-methyl styrene resins, branched and unbranched C_5 resins, C_9 resins, C_{10} resins, as well as styrenic and hydrogenated modifications of such. Tackifying resins range from being a liquid at 37 **[[.degree.]]** degrees C. to having a ring and ball softening point of about 135 degrees C. A preferred tackifying agent is a hydrogenated C.10 resin. The tackifying resins can be selected from any of the nonpolar types, which are commercially available. An example of a commercially available tackifying resin which is useful for the present invention includes the resin which is identified commercially by the trade designation Escorez 1310 LC and which is manufactured by Exxon Chemical Company. Normally, nonpolar tackifying resins which are useful with the present invention include resins which have partially, or completely hydrogenated C_9 or C_5 based hydrocarbon resins with softening points that are in a range of approximately 70 **[[.degree.]]** degrees C. to approximately 125 **[[.degree.]]** degrees C. Tackifying resins which are useful for the present invention can perhaps include polar tackifying resins, however, the choice of available polar tackifying resins is limited in view of the fact that many of the polar resins appear only partially compatible with the SEBS copolymers. As noted above, the tackifying resin selected which is

useful with the present invention will be about 0.5% to about 5%, by weight, of the entire adhesive composition and more preferably about 2-3% thereof.

On page 9, replace paragraph [022] with the following amended paragraph [022]:

[022] A plasticizer is broadly defined as a typically organic composition that can be added to thermoplastics, rubbers and other resins to improve extrudability, flexibility, workability, or stetchability. A minimum amount of fluid ingredient is necessary to the present invention. Such fluid ingredient may be provided as a plasticizer, a liquid resin, a liquid elastomer or any other material which flows at ambient temperatures. Plasticizers are used in the adhesive of this invention. Preferably the plasticizing agent is a liquid at ambient temperature, such as hydrocarbon oils, polybutene, liquid tackifying resins, liquid elastomers, and is present in amounts up to 5% by weight of the adhesive. Such oils are primarily hydrocarbon oils, low in aromatic content and are paraffinic or napthenic in character. The oils are preferably low in volatility, transparent and have as little color and odor as possible. The use of plasticizers in this invention also contemplates the use of olefin oligomers, low molecular weight polymers, vegetable oils and their derivatives and similar plasticizing liquids. The plasticizer that finds usefulness in the present invention can be any number of different plasticizers but it has been discovered that a plasticizer which include mono-olefin polymers such as what is commercially available under the trade designation Indopol H-100, and which is manufactured by Amoco, is particularly useful in the present invention as being compatible with SEBS. As will be appreciated, plasticizers have typically been employed to lower the viscosity of the overall adhesive composition without substantially decreasing the adhesive strength and/or the service temperature of the adhesive. The present adhesive composition has a viscosity of about 2,000 cP to about 50,000 cP at 200 **[[.degrees]]** <u>degrees</u> C., and a melting point of about 150.degrees C to about 200 degrees C. In view of the unexpectedly favorable viscosities, the adhesive composition of the present invention has spraying characteristics when employed with conventional manufacturing equipment.

On page 10, replace paragraph [025] with the following amended paragraph [025]:

[025] The SEBS hot melt adhesive composition of the present invention may be formulated using any of the techniques known in the art. A representative example of the prior art procedure involves placing all of the plasticizer and stabilizer in a jacketed mixing kettle, and preferably in a jacketed heavy duty mixer of the Baker-Perkins or Day type and which is equipped with rotors and thereafter raising the temperature of this mixture to a range of about 180 **[[.degrees]]** degrees C to about 200 **[[.degrees]]** degrees C. It should be understood that the precise temperature to be used in this step will depend upon the melting point of the particular ingredients. When the initial mixture, noted above, has been heated, the mixture is blanketed in carbon dioxide at a slow flow rate, and the resin described above is slowly added. When the resin is melted, and the desired temperature is reached, the copolymer is added to the mixture. The resultant adhesive composition mixture is then agitated until the copolymer is completely dissolved. A vacuum is then applied to the mixture to remove any entrapped air.

On page 11, replace paragraph [029] with the following amended paragraph [029]:

[029] A more specific embodiment of this adhesive composition has the following constituent elements:

a) about 50%, by weight, of a high molecular weight styrene-ethylene-butylene-styrene copolymer;

b) about 45%, by weight, of a styrene-isoprene-styrene copolymer;

c) about 3%, by weight, of a tackifying resin;

d) about 3%, by weight, of a plasticizer; and

about 0.1% to about 3%, by weight (based on the 100% calculated base adhesive composition above), of a hindered phenolic antioxidant and wherein the hot melted adhesive composition following application displayed an improved open time, and room temperature flow properties, and further had a viscosity of about 2,000 cP at 200 **[[0.degrees]]** degrees C., and a melting point of about 150.degrees C.

On page 13, replace paragraph [035] with the following amended paragraph [035]:

[035] As noted earlier, traditional hot melt adhesives which had been formulated using SIS, SBS, SEBS and APAO (amorphous polyalpha olefin) have a propensity when exposed to water for prolonged periods of time, to lose their bond strengths, with the result that laminations prepared with such adhesives will fail when exposed for prolonged periods of time to water. This presents a problem with toy doll playthings in that children freqently bath their dolls in both hot and cold water. As should be understood, such delaminations of an adjoined or pendant element in a resin constructed toy such as a doll or the like may cause the toy item's core integrity to fail with resulting undesirable effects such as pealing parts or general disassembly. As can be appreciated, the instant combination of SEBS with another SEBS compatible elastomeric copolymer in a hot melt adhesive overcomes any such deficiency in an adh